

REMARKS

Applicant has received and carefully reviewed the Office Action of the Examiner mailed October 6, 2008. Favorable reconsideration is respectfully requested in view of the above amendments and the following comments. Claim 11 has been amended to include elements of claim 20, which has subsequently been canceled. Claims 9, 14, 24 and 26 have been amended to resolve the Examiner's objections thereto. No new matter has been added as a result of these amendments.

Applicant thanks the Examiner for the indication of allowability for claims 3-5, 22-23 and 25-26, and believes that these claims are patentable for at least the reasons espoused by the Examiner. Moreover, Applicant believes that all of the pending claims are patentable. Favorable reconsideration is respectfully requested.

Applicant respectfully traverses the Examiner's rejection of claims 1, 6-7, 11-13 and 20 under 35 U.S.C. §103(a) as being unpatentable over Weber, U.S. Patent No. 3,592,132, in view of Batzar et al., U.S. Patent No. 6,103,361. The cited references fail, either separately or in combination, to describe or suggest the claimed invention.

The Examiner has acknowledged that Weber fails to describe particular elements of the claimed invention, including use of an optically variable ink having pigments that can be oriented by a magnetic field, and using at least one magnetic element to orient the pigments so as to cause a varying optical effect. Applicant agrees that Weber is missing these elements, but believes that Weber also fails to describe that the claimed at least one magnetic element is provided on the printing surface of the impression cylinder.

As the claimed invention requires that the magnetic element is provided on the printing surface of the impression cylinder, it will be appreciated that in the claimed invention, the magnetic element rotates together with the impression cylinder. As a result, the magnetic element is able to orient the pigments contained within the ink as a substrate is being transported through the printing machine.

In contrast, Weber describes magnetic elements (40) that are provided inside hollow roller (38). The magnetic elements (40) are mounted in a stationary manner inside hollow roller (38) and thus do not follow the rotation of hollow roller (38). Indeed, Weber appears to require that the magnetic elements (40) remain stationary as the essential purpose of such magnetic

elements (40) appears to be to cooperate with a doctor blade (31) provided inside the screen cylinder (1). The doctor blade (31) also remains substantially stationary with respect to the moving substrates (33) being printed.

Moreover, Weber's magnetic elements (40) are disposed such that their magnetic axes are directed toward a screen cylinder (1) in order to attract the doctor blade (31) so that it is pressed magnetically along its whole length against the interior face of the screen cylinder (1), as described at column 4, lines 24-44 of Weber. Thus, it will be understood that the sole purpose of Weber's magnetic elements (40) is to ensure a proper and constant pressure and contact between the screen cylinder (1) and the substrate (33) to be printed and be less sensitive to unevennesses in the carrier, in the substrate to be printed or in the screen cylinder itself, as described at column 1, lines 48-53 of Weber.

The Examiner relies upon Batzar et al. to provide elements admittedly absent from Weber. However, Batzar et al. do not remedy the above-noted shortcomings of Weber, i.e., that the magnetic element is provided on the printing surface of the impression cylinder. Indeed, Batzar et al. are directed to smooth, patterned substrates useful in producing decorative cookware which are formed by coating a base (2) with a mixture of fluoropolymer resin and magnetic/magnetizable flakes (10) and by magnetically inducing an image in the polymer coating composition.

According to Batzar et al., a liquid dispersion of a mixture of fluoropolymer resin and magnetizable flakes is applied as a spray onto the surface of the article to be decorated (see for instance Figure 1). Strictly speaking, Batzar et al. do not teach or suggest to use such mixture as an ink, even less as an ink usable for screen printing. More importantly, Batzar et al. specifically teach a methodology to orientate the magnetizable flakes in the sprayed composition wherein the processed article remains stationary throughout the orientation process. Batzar et al. therefore also fail to teach or suggest how articles might be processed while these are being transported, such as in the context of the claimed invention. It will be appreciated, therefore, that Batzar et al. fail to remedy the noted shortcomings of Weber. Favorable reconsideration is respectfully requested.

Applicant respectfully traverses the Examiner's rejection of claims 2, 14-16 and 21 under 35 U.S.C. §103(a) as being unpatentable over Weber, U.S. Patent No. 3,592,132, in view of

Batzar et al., U.S. Patent No. 6,103,361, and further in view of Pearce, U.S. Patent No. 4,186,944. Claim 1, from which claim 2 depends, and claim 11, from which claims 14-16 and 21 depend, are distinguished above as being patentable over Weber and Batzar et al. Pearce is not believed to remedy the noted shortcomings of the other two references, and thus claims 1 and 11 are believed to be patentable over all three references. As claims 2, 14-16 and 21 include the elements of claims 1 and 11, respectively, they are believed to be patentable for at least the same reasons. Claims 2, 14-16 and 21 also add further distinguishing features. Favorable reconsideration is respectfully requested.

Applicant respectfully traverses the Examiner's rejection of claims 8 and 19 under 35 U.S.C. §103(a) as being unpatentable over Weber, U.S. Patent No. 3,592,132, in view of Batzar et al., U.S. Patent No. 6,103,361, and further in view of Ritzerfeld, U.S. Patent No. 3,530,794. With respect to claim 8, Weber and Batzar et al. are distinguished above as failing to describe or suggest the claimed invention including a printing or transferring cylinder that includes at least one magnetic element on a surface of the cylinder in order to orientate the pigments of an optically variable ink. Ritzerfeld is not believed to remedy this shortcoming of Weber and Batzar et al.

In particular, Ritzerfeld illustrates (see Figures 1 and 2 and column 3, lines 10-28) making a master for use in a magnetic printing arrangement. According to Ritzerfeld, a master sheet or carrier sheet (1) consisting of non-magnetizable material, such as paper, is placed on top of and in contact with a layer (4a) having particles of iron oxide or ferrite which is adhesively attached to a waxed base sheet (5) by an adhesive (see Figure 1). The combined sheets (1, 4a, 5) are placed in a typewriter and imprints are made by a type bar (2) on the top face of the master sheet (1) so that characters or digits (3) are formed on the top face of the master sheet (1). Due to the impact of the type faces of type bar (2) on the master sheet (1) and layer (4a), parts (4) having the configuration of the characters or digits (3) adhere to the bottom face of the sheet (1) when the same is separated from the base sheet (5) to which the remaining portion (4b) of layer (4a) adhere (see Figure 2).

The thus-produced master (1), as shown in Figure 2, is then used in a magnetic printing arrangement, as for instance illustrated in Figure 3. In such printing arrangements, the master (1) is mounted on a rotary printing drum (7) with the layer portions (4) thereof facing outward, the

rotary printing drum (7) cooperating with a hollow counter-pressure roller (24) provided with an axial row of electromagnets (23) located inside the envelope of the hollow roller (24). An electromagnet (8) is mounted in the proximity of the leading part of the master (1) to magnetize the magnetizable layer portions (4) so that colored iron powder (11) supplied downstream of the electromagnet (8) is made to adhere to the magnetized portions (4) of the master (1). Sheets to be copied (17) are supplied between the rotary printing drum (7) and the hollow roller (24) and the iron powder (11) is transferred onto the sheets (17) under the effect of the axial row of electromagnets (23) provided in the hollow roller (24).

While it is true that the master sheet (1) in Figure 10 “covers” a magnetic element (46), it shall be appreciated that this magnetic element (46) is again stationary and is only intended to permit transfer of the iron powder from the master sheet (1) onto the sheets (17) to be copied. Thus, Ritzerfeld fails to describe or suggest an arrangement wherein at least one magnetic element is provided on the surface of a cylinder and therefore cannot be considered as remedying the noted shortcomings of Weber and Batzar et al.

With respect to claim 19, claim 1 is distinguished above as being patentable over Weber and Batzar et al. Ritzerfeld is not believed to remedy the noted shortcomings of the other two references, and thus claim 1 is believed to be patentable over all three references. As claim 19 includes the elements of claim 1, it is believed to be patentable for at least the same reasons. Claim 19 also adds further distinguishing features. Favorable reconsideration is respectfully requested.

Applicant respectfully traverses the Examiner’s rejection of claims 9 and 24 under 35 U.S.C. §103(a) as being unpatentable over Weber, U.S. Patent No. 3,592,132, in view of Batzar et al., U.S. Patent No. 6,103,361, and Ritzerfeld, U.S. Patent No. 3,530,794, and further in view of Larios, U.S. Patent No. 5,213,042. Claim 8, from which claim 9 depends, and claim 1, from which claim 24 depends, are distinguished above as being patentable over Weber, Batzar et al. and Ritzerfeld. Larios is not believed to remedy the noted shortcomings of the other two references, and thus claims 1 and 8 are believed to be patentable over all four references. As claims 9 and 24 include the elements of claims 1 and 8, respectively, they are believed to be patentable for at least the same reasons. Claims 9 and 24 also add further distinguishing features. Favorable reconsideration is respectfully requested.

Applicant respectfully traverses the Examiner's rejection of claim 18 under 35 U.S.C. §103(a) as being unpatentable over Weber, U.S. Patent No. 3,592,132, in view of Batzar et al., U.S. Patent No. 6,103,361, and Ritzerfeld, U.S. Patent No. 3,530,794, and further in view of Pearce, U.S. Patent No. 4,186,944. Claim 8, from which claim 18 depends, is distinguished above as being patentable over Weber, Batzar et al. and Ritzerfeld. Pearce is not believed to remedy the noted shortcomings of the other references, and thus claim 8 is believed to be patentable over all four references. As claim 18 includes the elements of claim 8, it is believed to be patentable for at least the same reasons. Claim 18 also adds further distinguishing features. Favorable reconsideration is respectfully requested.

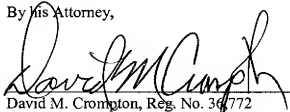
Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

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By his Attorney,

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